PTO/SB/08A (08-00) Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE U.S. DEPARTMENT OF U.S. DEPARTM

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)
Sheet 1 of 4

J	a collection of information unless it displays a	Vallu OIVIB COITH OF HUMBEL.
Ì	Application Number	10/555,712
ı	Filing Date	11/03/2005
	First Named Inventor	De Kock, Herman A.
	Group Art Unit	1614
	Examiner Name	
	Attorney Docket Number	TIP0072USPCT
ı		

U.S. P	ATENT	DOCUMENTS
--------	-------	-----------

		U.S. Patent Document			Date of Publication	Dagge Columna Linea
Examiner Initials	Cite No. ¹		d Code ² known)	Name of Patentee or Applicant of Cited Document	of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear
		5744481		Vasquez et al.	04-28-1998	
		5786483		Vasquez et al.	07-28-1998	
		5830897		Vasquez et al.	11-03-1998	
		5843946		Vasquez et al.	12-01-1998	
		5962216		Trouet et al.	10-05-1999	
		5968942		Vasquez et al.	10-19-1999	
		6046190		Vasquez et al.	04-04-2000	
		6060476		Vasquez et al.	05-09-2000	
		6248775	B1	Vasquez et al.	06-19-2001	

FOREIGN PATENT DOCUMENTS

		Foreign	Patent Documer	nt	Name of Patentee or	Date of Publication of Cited Document	Pages, Columns, Lines, where relevant	
Examiner Initials	Cite No. ¹	Office ³	Number ⁴ Kir	ndCode⁵	Applicant of Cited Document	mm-dd-yyyy	passages or relevant figures appear	T ⁶
		EP	0656887	B1	G.D. Searle & Co.; The Monsanto Company	10-28-1998		
		EP	0715618	B1	G.D. Searle & Co.; The Monsanto Company	12-16-1998		
		EP	0810209	B1	G.D. Searle & Co.; The Monsanto Company	06-05-2002		
		wo	97/45117	A1	Prototek Inc.	12-04-1997		
		wo	99/67254	А3	U.S. Dept. of Health & Human Services & Board of Trustees of University of Illlinois	12-29-1999		
***************************************		wo	99/67278	A1	ProBioDrug Gesellschaft Für	12-29-1999	English Abstract	
					Arzneimillenorschung WBH		and US Farmly Members provided	

Examiner	/Krietin Rianchi/	Date	
Signature	/Kristin Bianchi/	Considered	03/19/2009

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

¹ Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (08-00) Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)
Sheet 2 of 4

o a concenter of information amove it alepiage a	Talla Ollib control Halliboli
Application Number	10/555,712
Filing Date	11/03/2005
First Named Inventor	De Kock, Herman A.
Group Art Unit	1614
Examiner Name	
Attorney Docket Number	TIP0072USPCT

U.S.	PATENT	DOCUMENTS	

		U.S. Patent Document			D	D 01 11
Examiner Initials	Cite No. ¹		nd Code ² f known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear
		20020049164	A1	Demuth et al.	04/25/2002	Family member of WO WO99/67278A1
		200401715555	A1	Demuth et al.	09/02/2004	Family member of WO WO99/67278A1
		7,084,120	B2	Demuth et al.	08/01/2006	Family member of WO WO99/67278A1
		7,166,579	B2	Demuth et al.	01/23/2007	Family member of WO WO99/67278A1

FOREIGN PATENT DOCUMENTS

		Foreign	Patent Documer	nt	Name of Patentee or	Date of Publication of Cited Document	Pages, Columns, Lines, where relevant	
Examiner Initials	Cite No. ¹	Office ³	Number ⁴ Kir	ndCode ⁵	Applicant of Cited Document	mm-dd-yyyy	passages or relevant figures appear	T ⁶
		wo	99/67417	A2	U.S. Dept. of Health & Human Services	12-29-1999		
		wo	00/71571	А3	Boehringer Ingelhein Pharma KG	11-30-2000		
		wo	01/68145	A2	DuPont Pharmaceuticals Company	09-20-2001		
		wo	02/00263	A2	Corixa Corporation	01-03-2002		
		wo	03/048190	А3	The Curators of the University of Missouri	06-12-2003		

Examiner	/Kristin Bianchi/	Date	
Signature	/Miduit Dianom/	Considered	03/19/2009

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

¹ Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Under the Paperwork Reduction Act of 1995, no persons are required to respond to	a collection of information unless it displays a	valid OMB control number.
form 1449A/PTO	Application Number	10/555,712
	Filing Date	11/03/2005
ORMATION DISCLOSURE	First Named Inventor	De Kock, Herman A.
TEMENT BY APPLICANT	Group Art Unit	1614
	Examiner Name	
(use as many sheets as necessary) Sheet 3 of 4	Attorney Docket Number	TIP0072USPCT

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item	_2
Examiner's	Cite	(book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s),	T ²
nitials*	No.1	publisher, city and/or country where published	
		Abbott, C.A. et al., "Genomic Organization, Exact Localization, and Tissue Expression of the Human CD26 (dipeptidyl	
		peptidase IV) Gene.", Immunogenetics, 1994, Vol. 40, pages 331-338, Springer Verlag.	
		Ahmad, S., et al., "Dipeptidyl(amino)peptidase IV and Aminopeptidase M Metabolize Circulation Substance P in Vivo.",	
		The Journal of Pharmacology and Experimental Therapeutics, 1992, Vol. 260, No. 3, pages 1257-1261.	
		Anand, B. et al., "Novel Dipeptide Prodrugs of Acyclovir for Ocular Herpes Infections: Bioreversion, Antiviral Activity and	
		Transport Across Rabbit Cornea.", Current Eye Research, March 2003, Vol. 26, No. 3-4, pages. 151-163, XP009036464.	
000000000000000000000000000000000000000	000000000000	<u>wheh three am Encyclopestic enforcisestants</u> 4684 whem set Dublishing were his when the film	0000000000
	000000000000	Attacton, 5 et.al., <u>Solid Blace Reptide Synthesis, A Practical Approach</u> , 1999, Information Preseded. Oxford, England.	0000000000
		Atwell, G.A. et al., "Relationships Between Structures and Kinetics of Cyclization of 2-Aminoaryl Amides: Potential	
		Prodrugs of Cyclization-Activated Aromatic Mustards.", J. Med. Chem., 1994, Vo. 37, pages 371-380, American	
		Chemical Society.	
		Augustyns, K, et al., "The Unique Properties of Dipeptidyl-Peptidase IV and the Therapeutic Potential of DPP IV	
		Inhibitors.", Current Medicinal Chemistry, 1999, Vol. 6, No. 4, pages 311-327, Bentham Science Publishers BV, BE.	
		XP000870290.	
		Balajthy, Z. et al., "Synthesis and Functional Evaluation of a Peptide Derivative of 1-Beta-D-Arabinofuranosylcytosine.",	
		Journal of Medicinal Chemistry, 1992, Vol. 35, No. 18, pages 3344-3349, American Chemical Society, Washington, USA,	
		XP002939110.	
		Boonacker, E. et al., "The Multifunctional or Moonlighting Protein CD26/DPPIV.", European Journal of Cell Biology,	
		February 2003 , Vol. 82, No. 2, pages. 53-73, XP002302224.	
		Bouras et al., "Metabolism of Enterostatin in Rat Intestine, Brain Membranes, and Serum: Differential Involvement of	
		Proline-Specific Peptidases.", Peptides, 1995, Vol. 16, No. 3, pages 399-405, Pergamon Press, USA.	
		Cross et al., "Rules for The Nomenclature of Organic Chemistry, Section E: Sterochemistry.", Pure & Appl. Chemistry,	
		1976, Vol. 45, pages 11-30, Pergamon Press, Great Britain.	
		De Meester et al., "CD26, Let it Cut or Cut it Down.", Immunology Today, August 1, 1999, Vol. 20, No. 8, pages 367-	
		375, Elsevier Publications, Cambridge, GB, XP004177365.	
	000000000000	"Drug Bioavailability: Estimation of Solubility: Permeability: Absorption and Bioavailability: Methods and Brinciples in	0000000000
		Medicinal Chemistry, Edited by De Waterbeemb et al., August 1, 2003, Vol. 18, Wiley & Sons (ISBN 352730438X).	
		Gonzalez-Gronow, et al., "Dipeptidyl Peptidase IV (CD26) Is A Receptor For Streptokinase And Fibronectin On	
		Rheumatoid Arthritis Human Synovial Fibroblasts.", <u>Fibrinolysis</u> , 1996 , Vol.10, Suppl. 3, , page 32, Poster	
		Presentations.	
		Fields, G. B., "Chapter 2: Methods for Removing the Fmoc Group.", Methods in Molecular Biology, Vol. 35 Peptide	
		Synthesis Protocols, 1994, pages 17-27, M.W. Pennington and B.M. Dunn, Eds., Humana Press, Totowa, NJ, USA.	
		Friedrichsen et al., "Synthesis of Analogs of E-valacyclovir and Determination of Their Substrate Activity For The	
		Oligopeptide Transporter in Cac-2 Cells.", Eur. J. Pharm. Sci., 2002, Vol. 16, pages 1-13.	
		Han et al., "5'-Amino Acid Esters of Antiviral Nucleosides, Acyclovir, and AZT are Absorbed By The Intestinal PEPT1	
		Peptide Transporter.", Pharmaceutical Research, 1998, Vol. 15, No. 8, pages1154-1159, Plenum Publishing	
		Corporation.	
		Han et al, "Cellular Uptake Mechanism of Amino Acid Ester Prodrugs in Caco-2/hPEPT1 Cells Overexpressing a	
		Human Peptide Transporter.", Pharmaceutical Research, 1998, Vol 15, No. 9, pages 1382-1386, Plenum Publishing	
		Corporation.	
		Hegen, M., "Known Non-lineage CD Antigens.", Leukocyte Typing VI., Garland Publishing, 1997, pages 478-484.	
		Huuskonen et al., "Aqueous Solubility Prediction of Drugs Based on Molecular Topology and Neural Network	
		Modeling.", J. Chem. Inf. Comput. Sci., 1998, May-Jun Vol. 38, No. 3, pages 450-456.	
		Löster et al., "The Cysteine-Rich Region of Dipeptidyl Peptidase IV (CD26) Is The Collegen-Binding Site.", Biochem.	
		Biophys. Res. Commun., 1995, Vol. 217, No. 1, pages 341-348.	l

Signature / Kristin Blanchi/ Considered Considered	Examiner Signature	/Kristin Bianchi/	Date Considered	03/19/2009
--	-----------------------	-------------------	--------------------	------------

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) Sheet 4 of 4

a concentration and and a real plays a valid of the control number.				
Application Number	10/555,712			
Filing Date	11/03/2005			
First Named Inventor	De Kock, Herman A.			
Group Art Unit	1614			
Examiner Name				
Attorney Docket Number	TIP0072USPCT			

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		Mannhold, et al., "Calculation Procedures for Molecular Lipophilicity: A Comparative Study.", Quant. StructAct. Relat., 1996, Vol. 15, pages 403-409.	
		Masquelier M. et al., "Amino Acid and Dipeptide Derivatives of Daunorubicin.1. Synthesis, Physicochemical Properties, and Lysosomal Digestion.", <u>Journal of Medicinal Chemistry</u> , 1980 , Vol. 23, No. 11, pages 1166-1170, American Chemical Society, Washington, USA, XP000914522.	
	*******	McCutcheon's Emulsifiers & Determents, North American Edition, 1981. Title page	*************
		Mentlein, Rolf, "Dipeptidyl-peptidase IV (CD26)-role in The Inactivation of Regulatory Peptides.", Regulatory Peptides, 1999, Vol. 85, pages 9-24.	
		Ohtsuki, T. et al., "Good or Evil: CD26 and HIV Infection", <u>Journal of Dermatological Science</u> , April 2000 , Vol. 22, No. 3, pages 152-160, XP002302250.	
		Ohtsuki et al., "Negative Regulation of The Anti-human Immunodeficiency Virus And Chemotactic Activity of Human Stromal Cell-Derived Factor 1α by CD26/dipeptidyl Peptidase IV.", FEBS Letters, 1998, Vol. 431, pages 236-240.	
		Oravecz T. et al., "Regulation of the Receptor Specificity and Function of the Chemokine RANTES (Regulated on Activation, Normal T Cell Expressed and Secreted) by Dipeptidyl Peptidase IV (CD26)-mediated Cleavage.", <u>J. Exp. Med.</u> , December 1, 1997 , Vol. 186, No. 11, pages 1865-1872.	
		Proost P. et al., "Amino-Terminal Truncation of Chemokines by CD26/Dipeptidyl-peptidase IV.", <u>J. Biol. Chem.</u> , 1998 , Vol. 273, No. 13, pages 7222-7227.	
		Proost P. et al., "Processing by CD26/dipeptidyl-peptidase IV reduces The Chemotactic and Anti-HIV-1 Activity of Stromal-Cell-Derived Factor-1a.", FEBS Letters, 1998, Vol. 423, pages 73-76.	
		Proost P. et al., "Truncation of Macrophage-derived Chemokine by CD26/Dipeptidyl-Peptidase IV Beyond Its Predicted Cleavage Site Affects Chemotactic Activity and CC Chemokine Receptor 4 Interaction.", <u>J. Biol. Chem.</u> , 1999 , Vol. 274, No. 7, pages 3988-3993.	
		Qi, S.Y. et al., "Cloning and Characterization of Dipeptidyl peptidase 10, A New Member of An Emerging Subgroup of Serine Proteases.", <u>Biochem J.</u> , 2003 , No. 373, pages 179-189, Great Britain.	
000000000000000000000000000000000000000	0000000000	"Toncid Teachanbuch" 2 rd ad, Hansor Vorlag, Vionna, Sapt. 7, 1081, Vol. 52, Jeana 12, pages 211, 216, Abetract	000000000000000000
		Trouet, A. et al., "Extracellularly Tumor-Activated Prodrugs for the Selective Chemotherapy of Cancer: Application to Doxorubicin and Preliminary In Vitro and In Vivo Studies.", <u>Cancer Research</u> , April1, 2001 , Vol. 61, No. 7, pages. 2843-2846, American Association for Cancer Research, Baltimore, MD., USA, XP002204750.	
		Trugnan G. et al, "Dipeptidyl Peptidase IV (DDP-IV/CD26): Biochemistry and Control of Cell-Surface Expression.", Cell-Surface Peptidases in Health and Disease, Kenny, & Boustead eds., 1997, pages 203-271, BIOS Scientific Publishers, Oxford.	
		Yaron, A. et al., "Proline-Dependent Structural and Biological Properties of Peptides and Proteins", <u>Critical Reviews in Biochemistry and Molecular Biology</u> , 1993 , Vol. 28, No. 1, pages. 31-81, CRC Press, Boca Raton, Fl., USA, XP000925565.	

Examiner	11 6 1 1 Ch 1 1 1	Date	00000000
Signature	/Kristin Bianchi/	Considered	03/19/2009

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.